



## **Module Specification**

### **Design Project**

Version: 2028-29, v2.0, Approved

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## Part 1: Information

**Module title:** Design Project

**Module code:** UBLLXE-30-3

**Level:** Level 6

**For implementation from:** 2028-29

**UWE credit rating:** 30

**ECTS credit rating:** 15

**College:** College of Arts, Technology and Environment

**School:** CATE School of Architecture and Environment

**Partner institutions:** None

**Field:** Architecture and the Built Environment

**Module type:** Module

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** This capstone module provides students with the opportunity to integrate and apply the full range of knowledge and skills developed across the programme. Working within a studio environment, students act as professional engineers to develop a complete building services design package, from site analysis and environmental evaluation through to detailed mechanical or electrical system design. The module emphasises the use of BIM, compliance with CDM regulations, and the

demonstration of sustainability, performance, and professional standards in a real-world context.

**Features:** a capstone module delivered in a studio environment with supplementary lectures.

**Educational aims:** The module aims to:

Enable students to define and develop a project brief, responding to client needs and site conditions.

Provide experience in leading and coordinating the design of complex MEP systems through conceptual and detailed stages.

Develop competence in the use of BIM, digital modelling, and design management processes in line with professional expectations.

Foster skills in communication, critical reflection, and professional judgement through portfolio submissions and oral presentation.

**Outline syllabus:** Topics are indicative and may include, but are not limited to:

Design Management – performance criteria, design for commissioning and maintenance, sketches and schematics, co-ordination, BIM.

Environmental Evaluation – site analysis, microclimates, fabric analysis, dynamic modelling, load estimation, daylighting analysis.

Detailed Design – system calculations, heating and hot/cold water design, comfort cooling and refrigeration, control systems, space standards, feature lighting, room acoustics and noise control.

Sustainability and Performance – evaluation of environmental performance, comparison with benchmarks, and demonstration of compliance with relevant standards.

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** Studio-based learning (approx. 3 hours weekly) simulates professional practice, with students acting as lead building services engineers developing a complete design package.

Lectures and guest lectures provide theoretical grounding and insights from industry practitioners.

Independent learning includes directed reading, digital modelling, and preparation of portfolio outputs.

Formative reviews and mid-project critiques support feedback literacy and iterative improvement.

The module is delivered in line with the UWE Enhancement Framework (EF), embedding inclusivity, authentic learning, and the development of graduate attributes.

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Develop and manage a building services design brief using BIM and industry-standard methods to coordinate information and execution planning.

**MO2** Undertake and interpret site and environmental analyses to inform design decisions and evaluate opportunities and constraints.

**MO3** Design and justify mechanical or electrical building services systems through calculations, modelling, and professional documentation.

**MO4** Demonstrate and communicate the sustainability, performance, and compliance of building services design using benchmarks and professional presentation techniques.

**Hours to be allocated:** 300

**Contact hours:**

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/index.html) via the following link <https://uwe.rl.talis.com/index.html>

**Part 4: Assessment****Assessment strategy:** Strategy

Assessment reflects professional practice, requiring students to deliver a coordinated building services design through a portfolio of technical outputs and a formal presentation.

## Assessment Components

Portfolio (80%) – split across two submissions, including site and fabric analysis, BIM execution plan, design information management, system calculations, drawings, and specifications.

Presentation (20%) – professional oral defence of the design proposal, delivered to an internal and external panel.

## Resit Assessment

Portfolio – as above, with revised or alternative project focus.

Presentation – as above, undertaken individually if required.

**Assessment tasks:****Portfolio (First Sit)**

Description: Portfolio (4000 words)

Weighting: 80 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

**Presentation (First Sit)**

Description: Presentation (15 minutes)

Weighting: 20 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO4

**Portfolio (Resit)**

Description: Portfolio (4000 words)

Weighting: 80 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

**Presentation (Resit)**

Description: Presentation (15 minutes)

Weighting: 20 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO4

**Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Building Services Engineering {Apprenticeship-UWE} [Frenchay] BEng (Hons) 2024-25

Building Services Engineering [Frenchay] BEng (Hons) 2024-25

Building Services Engineering {Foundation} [GCET] BEng (Hons) 2024-25

Building Services Engineering [Frenchay] BEng (Hons) 2024-25

Building Services Engineering {Apprenticeship-UWE} [Frenchay] BEng (Hons) 2024-25

Building Services Engineering {Foundation} [GCET] BEng (Hons) 2025-26

Building Services Engineering [Frenchay] BEng (Hons) 2026-27

Building Services Engineering [Frenchay] BEng (Hons) 2026-27

Building Services Engineering [Frenchay] BEng (Hons) 2024-25

Building Services Engineering [Frenchay] BEng (Hons) 2026-27

Building Services Engineering [Frenchay] BEng (Hons) 2024-25

Building Services Engineering {Apprenticeship-UWE} [Frenchay] BEng (Hons) 2024-25

Building Services Engineering {Apprenticeship-UWE} [Frenchay] BEng (Hons) 2024-25